ART. XLVI.—*On Siemen's Universal Galvanometer for testing Telegraphic Lines.*

By R. L. J. ELLERY, ESQ.

[Contributed 12th August, 1872.]

The President exhibited a Siemen's Universal Galvanometer, and gave an oral description of its use and the method of testing with it telegraphic lines.

ART. XLVII.—*Notes on the Mechanical Assay of Quartz.* By G. FOORD, ESQ.

[Read 9th September, 1872.]

The brief note, concerning the mechanical assay of quartz, which I am now prepared to read, was entered in our Secretary's list as part of the business of the Society's last general meeting. It was intended to fulfil a requirement which similar brief explanations of mine have on former occasions fulfilled: namely, to come in, after the regular paper of the evening had been read and discussed, as a supplement, extending the proceedings of an otherwise short evening to a suitable length. The course of events, however, gave occasion for its postponement, and now, to prevent undue expectations and consequent disappointment, I think it best to explain, at the outset, that I cannot claim a very great importance or novelty for what I have to advance, nor can I say that I have devoted any amount of workmanship to the notes themselves, now offered to your notice. On the other hand, I feel some confidence in making a statement concerning the assay of quartz for gold, because it is a subject which has engaged my particular attention. Moreover, I trust that the point which I am about to urge, is one of practical significance, which it would be useful to promulgate; and, although the facts themselves may be familiar enough to the metallurgist, it seems to me that they may yet possess a degree of novelty to some at least of the members whom I meet here this evening. In this light, I ask you, Mr. President and gentlemen, to receive what I have to say, as a mere brief note, embodying a point of useful application.

The assay of auriferous quartz is the key to the extraction of the precious metal on the great scale; and there are two